

Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1-18. (Canceled)

19. (Currently Amended) A polypeptide, ~~characterized in that it comprises~~ comprising at least one fragment of a protein whose peptide sequence corresponds to SEQ ID No. ~~NO:~~ 9, said fragment comprising at least one ~~mutation in relation to the reference~~ sequence SEQ ID No. 8 of SEQ ID NO: 68 or SEQ ID NO: 72.

20-21. (Canceled)

22. (Currently Amended) The polypeptide as claimed in claim 19, characterized in that it comprises a protein whose peptide sequence ~~corresponds to~~ is identified by SEQ ID No. ~~NO:~~ 9.

23. (Currently Amended) The polypeptide as claimed in claim 19, characterized in that it consists of a protein whose peptide sequence ~~corresponds to~~ is identified by SEQ ID No. ~~NO:~~ 9.

24-25. (Canceled)

26. (Previously Presented) A method for detecting at least one ligand associated with multiple sclerosis, in a biological sample, characterized in that the biological sample is brought into contact with at least one polypeptide as defined in claim 19, and then the formation of a complex between said polypeptide and the ligand is detected.

27. (Currently Amended) The method as claimed in claim 26, characterized in that the biological sample is in addition brought into contact with at least one polypeptide comprising at least one fragment of a protein chosen from proteins whose peptide sequence in the native state ~~corresponds to~~ is selected from the group consisting of SEQ ID No. ~~NO:~~ 1 to SEQ ID No. ~~NO:~~ 8 and SEQ ID No. ~~NO:~~ 10 to SEQ ID No. ~~NO:~~ 29 and the peptide

sequences which exhibit at least 70% identity with any one of ~~the peptide sequences~~ SEQ ID No. ~~NO:~~ 1 to SEQ ID No. ~~NO:~~ 8 and SEQ ID No. ~~NO:~~ 10 to SEQ ID No. ~~NO:~~ 29, and the peptide sequences or the fragments of said sequences belonging to the same family of proteins chosen from Perlecan, the precursor of the retinol-binding plasma protein, ~~precursor of the ganglioside-GM2 activator protein~~, calgranulin B and saposin B.

28. (Previously Presented) The method as claimed in claim 26, characterized in that said ligand is an antibody, a receptor, a substrate for enzymatic activity or an enzyme for which said polypeptide is a cofactor.

29. (Currently Amended) A method for detecting at least one polypeptide as defined in claim 19, in a biological sample, characterized in that the biological sample is brought into contact with at least one ligand specific for said polypeptide, and then the formation of a complex between said polypeptide and said ligand is detected, wherein said ligand is selected from the group consisting of an antibody, a substrate with enzymatic activity, an enzyme for which said polypeptide is a cofactor and a receptor.

30-32. (Canceled)

33. (Previously Presented) A nucleotide fragment, characterized in that it encodes a polypeptide as defined in claim 19.

34-59. (Canceled)

60. (Previously Presented) The method as claimed in claim 26, characterized in that the biological sample is urine, cerebrospinal fluid or serum.

61. (Previously Presented) The method as claimed in claim 29, characterized in that the biological sample is urine, cerebrospinal fluid or serum.

62. (New) The method as claimed in claim 26, wherein the biological sample is in addition brought into contact with at least one polypeptide comprising at least one fragment of a protein chosen from proteins whose peptide sequence in the native state is selected from

the group consisting of SEQ ID NO: 1 to SEQ ID NO: 8 and SEQ ID NO: 10 to
SEQ ID NO: 29 and peptide sequences which exhibit at least 70% identity with any one of
SEQ ID NO: 1 to SEQ ID NO: 8 and SEQ ID NO: 10 to SEQ ID NO: 29.